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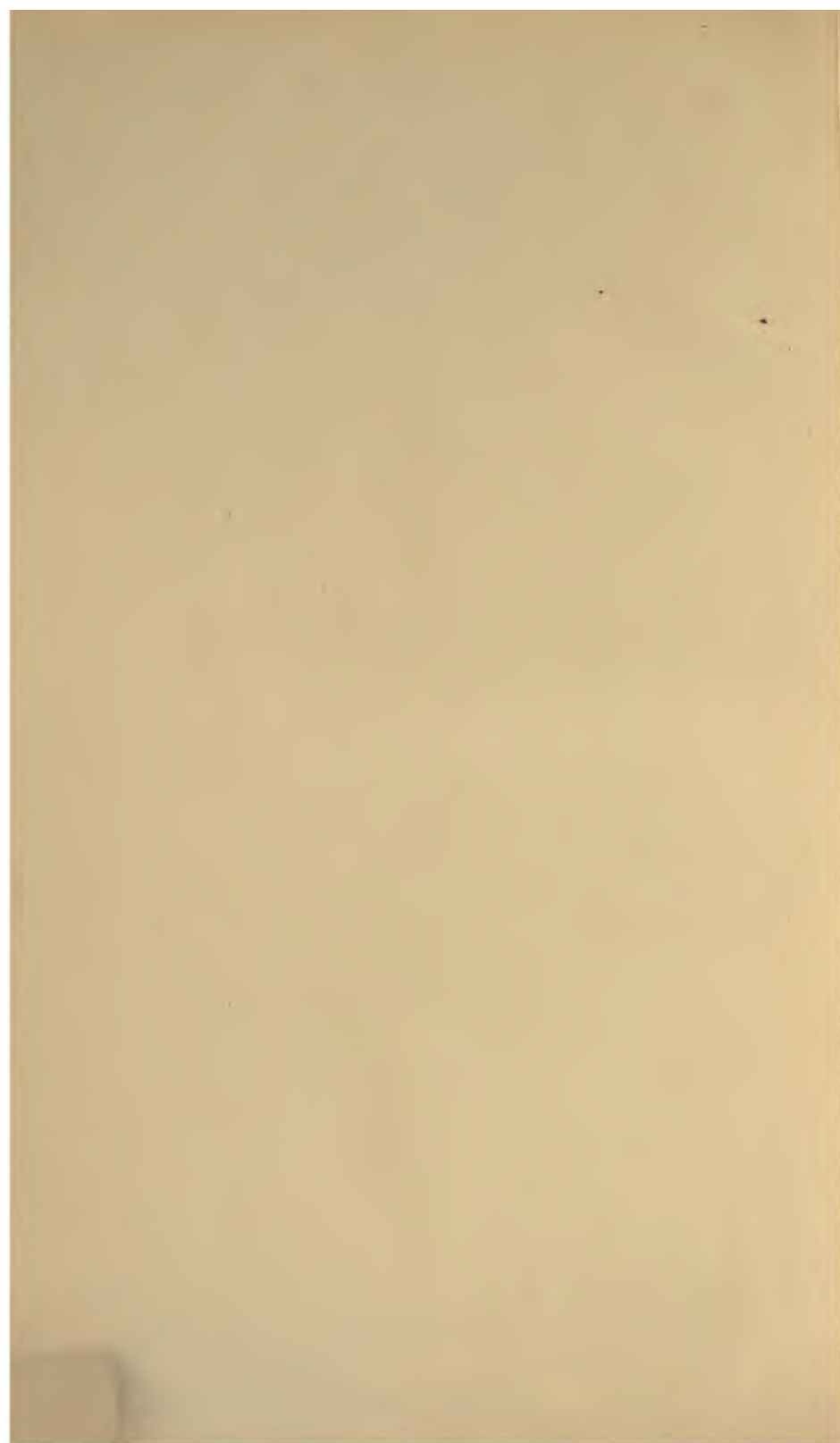
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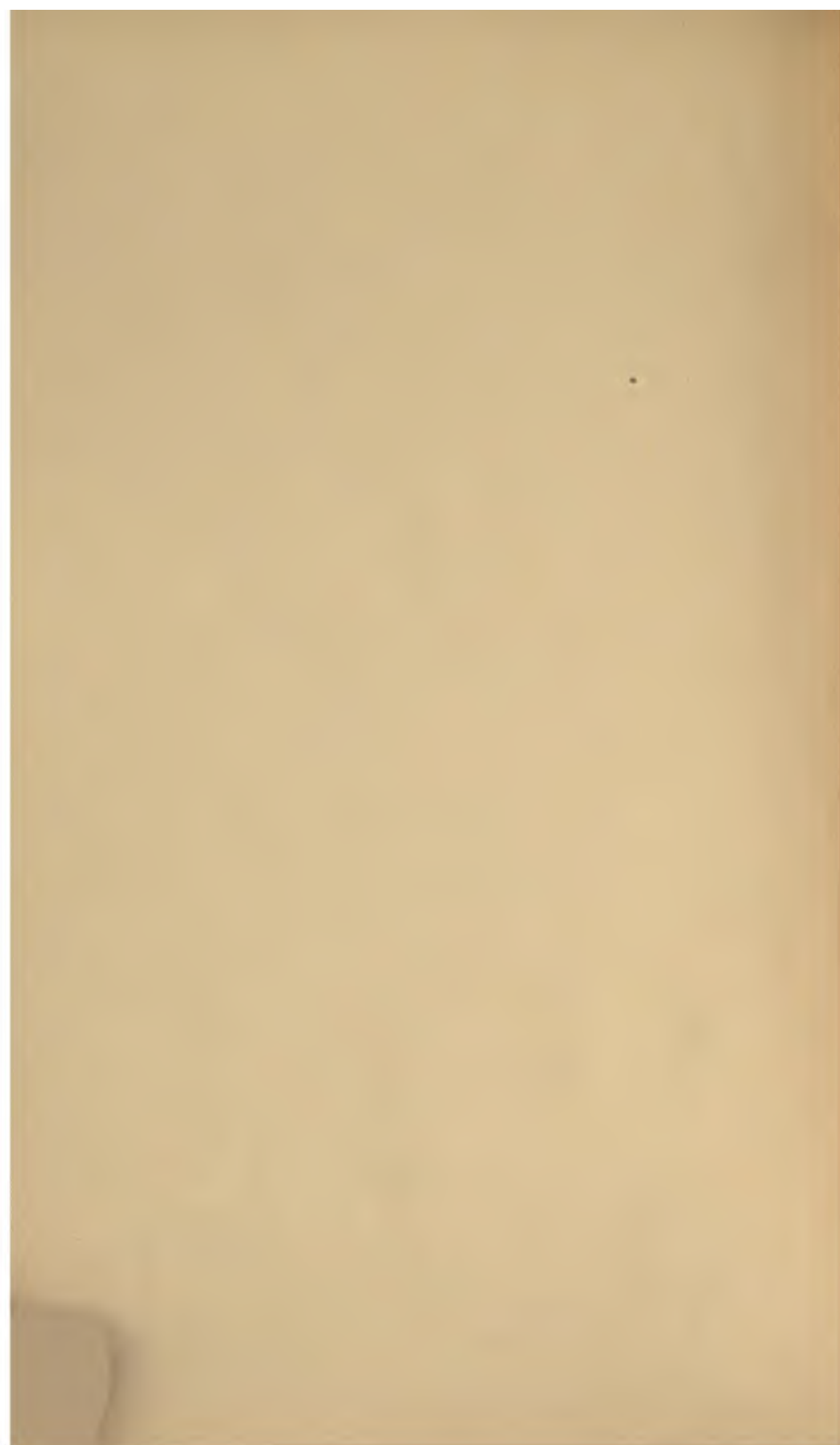


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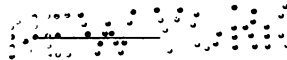


THE
MINING WORLD INDEX
of Current Literature

VOL. IV

LAST HALF YEAR

1913

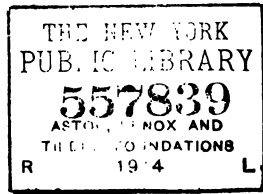


By GEO. E. SISLEY
Associate Editor
Mining and Engineering World

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Preface

The fourth volume of The Mining World Index of Current Literature (for the last half of 1913), like previous volumes, covers the world's literature on mining, metallurgy and kindred subjects and embraces all reference of any importance to the literature of the field it represents.

There is no claim that the work is perfect, but, being the only one of its kind devoted exclusively to the mining industry and, judging by the many kind words that have been said of it by prominent engineers, geologists and others connected with the industry throughout the world, we feel that our labors are being appreciated.

In The Mining World Index of Current Literature are classified all articles appearing in periodical magazines published in America, Europe, Africa and Australia on mining, mining engineering, metallurgy, mining geology, mineralogy, etc.; also the valuable publications of the world's mineral industries institutes and affiliated engineering and technical societies, as well as publications of the federal and state geological surveys and mining bureaus at home and abroad—not to mention new books. All these are indexed by a simple plan, easily understood. By the system of cross-indexing used one can readily find what is wanted on any mining or affiliated subject. In all cases where the title as published is vague a brief digest is given.

It should be remembered that in the search for some particular article covering a certain subject, where reference of any importance is made in that article to more than one subject, the article will also be indexed under that subject as well. It may be only a few lines in length, but those few lines may contain just the information you are in search of.

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SCHOOLS, SOCIETIES AND GOVERNMENT BUREAUS.

A

Acetylene Journal, Chicago.
Allgemeine österreichische Chemiker und
Techniker-Zeitung.
American Ceramic Society.
American Chemical Society.
American Electrochemical Society.
American Fertilizer, Philadelphia.
American Institute of Chemical Engineers.
American Institute of Electrical Engineers.
American Institute of Mining Engineers.
American Iron & Steel Institute.
American Journal of Science, New Haven,
Conn.
American Metal Society.
American Metallurgical Society.
American Mining Congress.
American Museum of Safety, New York.
American Peat Society.
American Railway Engineering Associa-
tion.
American Society of Engineering Con-
tractors.
American Society of Mechanical Engineers.
American Wood Preservers' Association.
Anales de la Sociedad Científica Argentina.
Annales de Mines, Paris.
Annales des Mines de Belgique, Brussels,
Belgium.
American Portland Cement Manufacturers.
Association of Mining Electrical Engineers,
England.
Association of Railway Electrical Engi-
neers.
Australasian Coal & Iron Trade Review,
Sydney.
Australasian Institute of Mining Engineers.
Australian Mining Standard, Melbourne.

B

Berg und Hüttenmännische Rundschau,
Kattowitz, Germany.
Berg & Hüttenm., Jahrb. Leoben-Pribram.
Bergwirtschaftliche Mitteilungen.
Birmingham Metallurgical Society, Eng-
land.
Bitumen, Wiesbaden, Germany.
Black Diamond, Chicago.
Braunkohle.
Brick & Clay Record, Chicago.
British Columbia Bureau of Mines.
British Columbia Mining Exchange & En-
gineering News, Vancouver, B. C.
British Columbia Mining & Engineering
Record, Victoria, B. C.
British Guiana Institute of Mines and
Forests.
Bulletin of the Bureau of Standards,
Washington, D. C.
Bulletin of the Imperial Institute, London.
Bulletin of the Pan-American Union,
Washington, D. C.

C

California Miners' Association.
California State Mining Bureau.
Canada Department of Mines, Ottawa.
Canada Geological Survey.
Canadian Engineer, Toronto.
Canadian Mining Institute.
Canadian Mining Journal, Toronto.
Cassier's Magazine, New York.
Cement, New York.

E

Economic Geology, Urbana, Ill.
Edinburgh Geological Society, Edinburgh,
Scotland.
Eisen Zeitung, Berlin, Germany.
El Economista Mexicana, Mexico City.
Electrical Engineer, London.
Electrical Review, London.
Electrical Review & Western Electrician,
Chicago.
Electrician, London.
Electrotechnik & Maschinenbau, Vienna,
Austria.
Elektrochemische Zeitschrift, Berlin, Ger-
many.
El Paso Mining Journal, El Paso, Tex.
Engineering Association of New South
Wales, Sydney, Australia.
Engineering Digest, New York.
Engineering, London.
Engineering Magazine, New York.
Engineering News, New York.
Engineering Record, New York.
Engineering Review, London.
Engineering & Contracting, Chicago.
Engineering & Mining Journal, New York.
Engineers' Club, Philadelphia.
Engineers' Society of Eastern Pennsyl-
vania.
Engineers' Society of Western Pennsyl-
vania.
English Ceramic Society, England.
Excavating Engineer, Milwaukee, Wis.
Faraday Society, London.
Cement Age, New York.
Centralblatt der Hütten & Walzwerke,
Berlin, Germany.
Chemical Engineer, Chicago.
Chemical, Metallurgical & Mining Society
of South Africa, Johannesburg.
Chemiker-Zeitung, Cöthen, Germany.
Chemiker & Techniker-Zeitung, Vienna,
Austria.
Chemist-Analyst.
Cleveland Engineering Society, Cleveland,
Ohio.
Coal Age, New York.
Coal Mining Institute of America.
Coal Trade Bulletin, Pittsburgh.
Coal & Coke Operator, Pittsburgh.
Colliery Engineer, Scranton, Pa.
Colliery Guardian, London.
Colorado Scientific Society.
Colorado State Bureau of Mines.
Columbia School of Mines Quarterly, New
York.
Compressed Air Magazine, New York.
Connecticut State Geological & Natural
History Survey.
Cornwall Mining Association and Institute,
Cornwall, England.
Cuerpo de Ingenieros de Minas del Peru,
Lima, Peru.

D

Der Bergbau, Gelsenkirchen, Germany.
Der Erzbergbau, Berlin, Germany.
Der Kohleninteressent, Teplitz, Bohemia.
Deutsche Bergwerks Zeitung, Essen-Ruhr,
Germany.
Deutsche Technik, Germany.
Die Fördertechnik, Wittenberg, Germany.
Domestic Engineering, Chicago.

F

Federated Malay States Mines Report, Singapore.
 Ferrum, Aachen, Germany.
 Florida State Geological Survey, Tallahassee.
 Franklin Institute, Philadelphia, Pa.

G

General Electric Review, Schenectady, N. Y.
 Geological Society of South Africa.
 Geological Society of Tokyo, Japan.
 Geological Society of Washington, Washington, D. C.
 Georgia Geological Survey, Atlanta.
 Glasserei Zeitung, Berlin, Germany.
 Glückauf, Essen, Germany.
 Great Britain Geological Survey.

I

Idaho State Inspector of Mines.
 Ideal Power, Chicago.
 Illinois State Geological Survey, Urbana, Ill.
 Illuminating Engineering Society.
 India Geological Survey, Calcutta.
 Indian & Eastern Engineer, Calcutta.
 Indiana Department of Geology & Natural Resources, Indianapolis.
 Industrial Advocate, Halifax, Nova Scotia.
 Industrial Engineering, New York.
 Informaciones y Memorias, Boletín de la Sociedad de Ingenieros, Lima, Peru.
 Informes y Memorias del Instituto Mexicano, de Mines of Metallurgia, Mexico.
 Ingeniería, Spain.
 Institute of Engineers & Ship Builders, Scotland.
 Institute of Marine Engineers, England.
 Institution of Mining Engineers, London.
 Institution of Mining & Metallurgy, London.
 International Association for Testing Materials.
 International Congress for Radiology & Electrolgy.
 International Railway Fuel Association.
 Iowa Engineer, Ames, Iowa.
 Iowa Geological Survey.
 Iowa State College Engineering Experiment Station, Ames.
 Iron Age, New York.
 Iron Trade Review, Cleveland, O.
 Iron & Coal Trades Review, London.
 Iron & Steel Institute, London.

J

Journal du Four Electrique et de l'Electrolyse, Paris.
 Journal du Pétrole, Paris.
 Journal of Electricity, Power & Gas, San Francisco.
 Journal of Geology, Chicago.
 Journal of Industrial & Engineering Chemistry, Easton, Pa.

K

Kali, Erz & Kohle, Halle, Germany.
 Kali, Halle, Germany.
 Kansas University Geological Survey.
 Kentucky Geological Survey.
 Kentucky Mining Institute.
 Kohle & Erz, Kattowitz, Germany.

L

La Metallurgia Italiana, Milan, Italy.
 La Metallurgie du Nord, Maubeuge, France.
 Lackawanna Chemical Society, Scranton, Pa.
 Lake Superior Mining Institute, Ishpeming, Mich.
 L'Echo des Mines de la Métallurgie, Paris, France.
 Le Pétrole, Paris, France
 Le Phosphate, Paris.
 Levant Trade Review.
 Liverpool Geological Association, Liverpool, England.

Los Angeles Chamber of Mines & Oil, Los Angeles, Cal.
 Louisiana Geological Survey, Baton Rouge.
 L'Opinion Financiere, Paris, France.

M

Malayan Tin & Rubber Journal, Ipoh-Perak, F. M. S.
 Manchester Association of Engineers, Manchester, England.
 Manchester Mining & Geological Society, England.
 Mechanical World, Manchester, England.
 Metall und Erz, Halle, Germany.
 Metallurgia Italiana, Italy.
 Metallurgical & Chemical Engineering, New York.
 Metallurgie, Halle, Germany.
 Mexican Institute of Mining & Metallurgy, Mexico.
 Mexican Mining Journal, Mexico City.
 Michigan Geological Survey, Lansing, Mich.
 Midland Institute of Mining, Civil & Mechanical Engineers, England.
 Mining Engineering, London.
 Mining Institute of Scotland, Hamilton.
 Mining Journal, London.
 Mining Magazine, London.
 Mining Science, Denver, Colo.
 Mining Society of Nova Scotia, Halifax.
 Mining World & Engineering Record, London.
 Mining & Engineering Review, Melbourne, Australia.
 Mining & Engineering World, Chicago.
 Mining & Geological Institute of India, Calcutta.
 Mining & Metallurgical Society of America.
 Mining & Scientific Press, San Francisco.
 Minnesota Geological & Natural History Survey.
 Mississippi State Geological Survey.
 Missouri Bureau of Geology & Mines, Rolla.
 Missouri Geological Survey.
 Missouri School of Mines.
 Montan-Zeitung für Oesterreich-Ungarn und die Balkanländer, Graz, Austria.
 Montana Inspector of Mines' Reports, Helena.
 Montanistische Rundschau, Berlin, Germany.

N

National Academy of Sciences.
 National Association of Colliery Managers, London.
 National Association of Stationary Engineers.
 National Geographic Magazine, Washington, D. C.
 National Lime Manufacturers' Association, Riverton, Va.
 Natural Gas Journal, Buffalo, N. Y.
 New Jersey Geological Survey, Trenton.
 New South Wales Engineering Association, Sydney.
 New York & Eastern Pennsylvania Coal Merchants' Association.
 New Zealand Geological Survey, Wellington.
 New Zealand Institute, Wellington.
 North Carolina Geological Survey, Chapel Hill.
 North of England Institute of Mining & Mechanical Engineers, Newcastle-on-Tyne, England.
 North Staffordshire Institute of Mining & Mechanical Engineers, Stoke-on-Trent, England.
 Northwest Mining & Metallurgy, Spokane, Wash.
 Nova Scotia Mining Society.

O

Oesterrichische Zeitschrift für Berg- und Huttenwesen, Vienna.
 Oil Age, Los Angeles, Cal.
 Oklahoma Geological Survey, Norman.
 Ontario Bureau of Mines, Toronto.
 Oxford Ophthalmological Congress, England.

P

Pacific Mining Journal, Seattle, Wash.
 Pahasapa Quarterly, Rapid City, S. D.
 Pan American Union, Washington, D. C.
 Pennsylvania Mines Department, Harrisburg.
 Pennsylvania Topographic & Geologic Survey, Harrisburg.
 Peru Today, Lima.
 Petroleum, Berlin, Germany.
 Petroleum World, London.
 Pfalz-Saarbrücker Bezirksvereins deutscher Ingenieure, Germany.
 Philadelphia Engineers' Club, Philadelphia.
 Philippine Journal of Science, Manila.
 Popular Mechanics, Chicago.
 Power, New York.
 Practical Electricity & Engineering, Chicago.
 Practical Engineer, Chicago.

Q

Quebec Bureau of Mines, Quebec.
 Quebec Department of Colonization, Mines & Fisheries, Quebec.
 Queensland Geological Survey, Brisbane.
 Queensland Government Mining Journal, Brisbane.

R

Radium, Pittsburgh.
 Rassegna Mineraria Metallurgica e Chimica, Turin, Italy.
 Resources of Tennessee, Nashville.
 Revue de Metallurgie, France.
 Revue des Matériaux de Construction et de Travaux Publics, Paris.
 Rhodesia (Southern) Mines Department, Salisbury.
 Rhodesian Chamber of Mines, Bulawayo.
 Rock Products, Chicago.
 Resoconti delle Riunioni Asso. Sarda, Italy.
 Revista Minera Metallurgica y de Ingeniería, Madrid, Spain.
 Revista Minera e Industria de Linares, Spain.
 Revue d'Electrochimie et d'Electrometallurgie, Paris, France.
 Revue Noire, Paris, France.
 Revue Pratique des Industries Metallurgiques, Paris, France.
 Rigasche Industrie Zeitung, Riga, Russia.
 Royal Geological Society of Cornwall, England.
 Royal Society of Arts Journal, London.

S

Salt Lake Mining Review, Utah.
 Scientific American, New York.
 Science & Art of Mining, Wigan, England.
 Sibley Journal of Engineering, Ithaca, N. Y.
 Smithsonian Institution, Washington, D. C.
 Société Amicale des Anciens Elèves de l'Ecole des Maîtres-Mineurs de Douai, France.
 Société Chimique de Belgique, Brussels, Belgium.
 Société des Ingénieurs Civils de France.
 Society of Arts, London.
 Society of the Chemical Industry, London.
 Society of the Chemical Industry, New York.
 South Africa Engineering, London.
 South African Association of Engineers, Johannesburg.
 South African Institute of Electrical Engineers.
 South African Mining Journal, Johannesburg.
 South Dakota Engineering Society.
 South Dakota Inspector of Mines, Sioux City, S. Dak.
 South Dakota School of Mines, Rapid City, S. Dak.
 South Staffordshire & Warwickshire Institute of Mining Engineers, Birmingham, England.

South Wales Institute of Engineers, Cardiff, Wales.
 Staffordshire Iron & Steel Institute, England.
 Stahl und Eisen, Düsseldorf, Germany.
 Südwestdeutsche Industrie Zeitung, Saarbrücken, Prussia.

T

Technische Blätter, Essen-Ruhr, Germany.
 Technische Centralanzeiger, Germany.
 Tech. du Nord de la France.
 Tennessee State Geological Survey, Nashville.
 Tonindustrie Zeitung, Berlin, Germany.
 Transvaal Chamber of Mines, Johannesburg.

U

United States Bureau of Mines, Washington, D. C.
 United States Bureau of Standards, Washington, D. C.
 United States Bureau of Standards.
 United States Consular Reports, Washington, D. C.
 United States Department of Agriculture, Washington, D. C.
 United States Department of Commerce and Labor, Washington, D. C.
 United States Geological Survey, Washington, D. C.
 University of Illinois, Engineering Experiment Station, Urbana.
 University of Texas, Austin.
 University of Texas Mineral Survey.

V

Vancouver, B. C., Chamber of Mines, Vancouver, B. C.
 Victoria Chamber of Mines, Melbourne, Australia.
 Virginia Geological Survey, Charlottesville.

W

West Australian Mining, Building & Engineering Journal, Kalgoorlie.
 West of Scotland Iron & Steel Institute, Glasgow.
 West Virginia Geological Survey, Morgantown.
 Western Australia Department of Mines, Perth.
 Western Australia Geological Survey, Perth.
 Western Australia Institution of Engineers, Perth.
 Western Society of Engineers, Chicago.
 Wisconsin Engineer, Madison.
 Wisconsin Geological & Natural History Survey, Madison.
 Wood Preservers' Association, Chicago.
 Wyoming Geological Survey, Cheyenne.

Y

Yale Scientific Monthly, New Haven, Conn.

Z

Zeitschrift der Oberschlesischen Berg & Hüttenmannischen Verein, Kattowitz, Germany.
 Zeitschrift des Internationalen Vereines der Bohringenleure & Bohrtechniker, Vienna, Austria.
 Zeitschrift des Zentral Verbandes der Bergbau Betriebsleiter, Dux, Bohemia.
 Zeitschrift für des Berg, Hütten & Salinen Wesen in preussischen Staate, Berlin, Germany.
 Zeitschrift für das gesamte Schliess & Sprengstoffwesen, Munich, Germany.
 Zeitschrift für Elektrochemie, Halle, Germany.
 Zeitschrift für praktische Geologie, Berlin.
 Zentral - Blatt Kunstidünger Industrie, Mannheim, Germany.

Explanations and Abbreviations

The entries show:

- (1) The author of the article.
- (2) A dash if the name is not apparent.
- (3) The title, in italics, of the article or book. Titles in foreign languages are ordinarily followed by a translation or explanation in English.
- (4) When the original title is insufficient a brief amplification is added. This addition is in brackets.
- (5) The journal in which the article appeared; also the date of issue, and the page on which the article begins.
- (6) Approximate number of words. Illus-

trated articles are indicated by an asterisk (*).

(7) The price. Articles mentioned will be supplied to subscribers of Mining and Engineering World and others at the prices quoted. Two-cent postage stamps will be accepted on orders less than \$1. Subscribers will be allowed a discount of 5 cts. if the price of the article exceeds 50 cts.

NOTE.—When there is more than one author to an article, only the first named appears in alphabetical arrangement, the others appearing, however, on the page or pages designated in author's index.

Subjoined is a list of the commoner abbreviations found in this work. They are used chiefly in the names of periodicals, and of associations. The abbreviations will be found easily intelligible at sight, and are what they purport to be—self-explanatory abbreviations, not symbols.

Abst.—Abstract.
Acad.—Academy; Académie; Accademia.
Adv.—Advance.
Afr.—Africa; African.
Akad.—Akademie.
Allgm.—A 'gemeine.
Amer.—American.
A. I. M. E.—American Institute Mg. Eng.
Archts.—Architects.
Assn.—Association.
Ber.—Berichte.
Bol.—Boletín; Boletim; Bollettino.
Bull.—Bulletin.
Bur.—Bureau.
Centralbl.—Centralblatt.
C-R.—Compte-Rendu; Resoconti.
Chap.—Chapter.
Chem.—Chemical.
Chemy.—Chemistry.
Coll.—College.
Colly.—Colliery.
Cong.—Congress.
Conv.—Convention.
d.—des (French and German).
Dept.—Department.
Deu.—Deutsche, etc.
Econ.—Economic.
Ed.—Editorial.
Elect.—Electrical.
Engg.—Engineering.
Engr.—Engineer.
Engrs.—Engineers.
Ext.—Extract.
f.—for; für.
Gaz.—Gazette.
Geol.—Geology.
Geolog.—Geological.
Ges.—Gesellschaft.
Gouv.—Government.

Hüttenm.—Hüttenmännische.
Ind.—Industrial; Industriel; Industrielle.
Ingr.—Ingenleure, Ingenieros.
Inst.—Institute; Institut; Instituto.
Instn.—Institution.
Intl.—International.
Jahresber.—Jahresbericht.
Jahrb.—Jahrbuch.
Jnl.—Journal.
Mag.—Magazine.
Mech.—Mechanical.
Met.—Metallurgy.
Metl.—Metallurgical.
Mex.—Mexican.
Mfrs.—Manufacturers.
Mg.—Mining.
Min.—Mineral.
Mittlgn.—Mitteilungen.
Oestr.—Oesterreichische; Oesterreich.
Proc.—Proceedings.
Quart.—Quarterly.
Rec.—Record.
Rept.—Report.
Res.—Resources.
Rev.—Review; Revue; Revista.
Sci.—Science; Sciences.
Scient.—Scientific.
Soc.—Society; Société; Società.
Suppl.—Supplement; Supplementary.
Surv.—Survey.
Tech.—Technology.
Trans.—Transactions.
Ver.—Verein.
Verb.—Verband.
Verh.—Verhandlungen.
Univ.—University.
Zentralbl.—Zentralblatt.
Ztg.—Zeitung.
Zts.—Zeitschrift.

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PART I.

ORES AND MINERAL PRODUCTS.

METALS AND METAL ORES.

CHAPTER I.

GOLD, SILVER AND PLATINUM.

GOLD

Gold Fields and Mining

Akin, A. D.—*The Olancho Country, Honduras*.—M. & S. P., July 12, 1913; p 49; 3000 w*; 20c.

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CHAPTER III.

LEAD AND ZINC.

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CHAPTER V.

ALLOYS, ANTIMONY, CHROMIUM, MANGANESE, MOLYBDENUM.

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NON-METALS.

CHAPTER VIII.

FUELS AND BY-PRODUCTS.

COAL

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CHAPTER IX.

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CHAPTER X.

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MINES AND MINING (b*).

CHAPTER XIV

TRANSPORTATION, CONVEYING, ETC.

Transportation (Rail)

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Anderson, Arvid R.—*The Storage Battery Locomotive in Coal Mines*.—Colly. Engr., Oct., 1913; p 146; 5000 w*; 35c.

Barneveld, Charles E. van.—*Iron Mining in Minnesota*.—Bull. 1, Minn. School of Mines Exp. Station; 215 pp*.

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Dean, Samuel.—*Coal Mining in the United States, with Special Reference to the Treatment of Coal Dust and Haulage by Electric Locomotives*. (Abstract of paper read before N. of England Inst. of Mg. & Mech. Engrs.).—Ir. & C. Tr. Rev., London, Aug. 8, 1913; p 196; 2800 w; 35c.

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Evans, A. W.—*Mining Plant of the Petros Coal Co., Tennessee*.—Colly. Engr., Oct., 1913; p 151; 1600 w*; 35c.

Evans, J. Clark.—*The Use of Steel Ties in Mining* (Paper read before W. Va. Coal

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Hall, J. J., and Booth, F. L.—*Ashington and Ellington Collieries, Great Britain*.—Iron & Coal Trade Rev., London, Nov. 21, 1913; p 795; 9500 w*; 35c.

Haines, H. T.—*First Report of the Utah State Bureau of Immigration, Labor and Statistics for the Years 1911-1912*.—Ninth report of (Utah) State Bureau of Statistics, Salt Lake City; 367 pp*.

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Higgins, Will C.—*The Spring Canyon Coal Co., Utah*.—S. L. Mg. Rev., June 30, 1913; p 9; 3500 w*; 25c.

Hockensmith, W. D.—*Mine-Car Construction*.—Colly. Engr., Oct., 1913; p 175; 700 w; 35c.

Hodges, R. O.—*History of the Gasoline Mine Motor*.—Coal Age, July 19, 1913; p 81; 3500 w*; July 26; p 118; 2400 w; Aug. 2; p 156; 2000 w; 60c.

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Kennedy, Geo. M.—*The Electric Mining*

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- Schulze-Höing, Bergassessor.—*Die Akkumulatoren Grubenlokomotiven*. [Accumulator mine locomotives].—Technische Blätter, Aug. 31, 1913; p 290; 1600 w*; 35c.
- Seeber, R. B.—*Winona Stamp Mill, Mich.* (Paper read before L. S. Mg. Inst.).—Met. & Chem. Engr., Oct., 1913; p 549; 4500 w*; 35c.
- Strantz, Major von.—*Die neue Nord-Südbahn in Deutsch-Südwestafrika*. [The new North-South railroad in German Southwest Africa].—Südwestdeutsche Industrieztg., May 17, 1913; p 293; 1000 w*; 35c.
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- Taft, Wm. H.—*Railway Routes in Alaska. Message from the President of the United States Transmitting Maps and Profiles to Accompany the Report of the Alaska Railroad Commission*.—Doc. No. 1346, Part 2, House of Representatives, 62nd Congress, 3d Session; 19 maps.
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- New Type of Mine Trolley*; [Westinghouse product].—E. & M. J., June 14, 1913; 400 w*; 25c.
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- Edholm, C. L.—*Motor-Truck Ore Haulage in Arizona*; [At Calumet & Copper Creek property].—E. & M. J., June 14, 1913; p 1177; 1500 w*; 25c.
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POWER AND MACHINERY.*

CHAPTER XIX.

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PART IV.

MISCELLANEOUS.*

CHAPTER XX.

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